

# CALIFORNIA SCIENCE & ENGINEERING FAIR 2018 PROJECT SUMMARY

Name(s) **Project Number** 

**Homin Key** 

**S2307** 

# **Project Title**

# Building an Effective System to Improve the Placement and Growth of **Mycelium in Its Effect towards Bees and Varroa Mites**

**Abstract** 

# Objectives/Goals

The objective of this project is to find the best way to place Mycelium in a bee farm environment and to see its effect on honey bees and the Varroa Mites. I implemented a Mycelium Box that was placed outside of the colony while the mycelium frame was placed inside the colony.

#### Methods/Materials

I used Mycelium that was obtained by a commercial product (Back to the Roots: Mushroom Farm Kit). I was also given 18 bee colonies by a local bee keeper.

The Mycelium box and mycelium frame were compared. The Mycelium box showed greater number of deaths in Varroa Mites and showed a more active hive.

### **Conclusions/Discussion**

The performance of the Mycelium box showed that Mycelium should be placed in an open environment and that the Mycelium is also effecting the activeness of the bees.

# **Summary Statement**

I compared Mycelium's effect on the bees and Varroa mites in a close and open environment.

### Help Received

I designed the Box and Frame but received supervision when testing with the Bees by Bee Keepers.